

Blue River Watershed Association (BRWA), Washburn University Institute of Technology (WIT), and Johnson County Community College brings ***K.I.D.S. in StreamsSM*** (Kids Investigate, Discover, and Study in Streams) to middle, high, and college level students. These ***K.I.D.S. in StreamsSM participants, and project partners***, are trained in BRWA's trademark program, T.R.U.E. BlueSM (Teaching Rivers in an Urban EnvironmentSM) a 4-Day, 4- Lesson water quality-monitoring curriculum. Teacher Cadets and college students lead portions, or all of T.R.U.E. BlueSM to middle school students.

T.R.U.E. BlueSM is a watershed literacy, water quality monitoring curriculum targeting students in 6th grade and up.

T.R.U.E. BlueSM will be taught by participating college students and Blue River Watershed Association (BRWA) certified educators. In addition to college students, Teacher Cadets from area high school education programs will serve as group leaders during Lesson 3 of the curriculum.

- This E-STEM (Environmental, Science, Technology, Education, and Mathematics) curriculum has been used by BRWA for twenty-three years and impacts an average 10,000 students and educators annually. Through T.R.U.E. BlueSM, BRWA uses critical thinking skills to teach students, teachers, and community members to participate in water quality monitoring throughout watersheds in the Metro Area. Together they learn about stormwater runoff, chemical pollutants, the importance of clean water as a natural resource, and the impacts people have in an urban environment. Students and their teachers are trained in the classroom to perform ten chemical and non chemical tests, using proper safety and procedural protocols.
- **First Lesson - Asking the right question:** An introduction to watersheds, storm water runoff, physical and chemical pollution, and the detrimental effects of pollution to streams, rivers, and eventually the oceans.
- **Second Lesson - Preparing for field work:** BRWA Educators conduct in-class training as students learn proper safety and testing protocols on professional Surface Water Quality HACH chemical test kits.
- **Third Lesson - Field Work at local stream:** Students go to a nearby stream or river and using the HACH kits, conduct ten chemical and non-chemical water quality tests. Students observe first-hand the adverse effects of pollution. ***For many students, this may be the first trip to a river.***
- **Fourth Lesson - Analyzing Student Data** - Using data collected from water tests, students use charts, graphs and calculators to determine the final Water Quality Index score for the river in which they tested. Discussion and conclusions are drawn from the results. What are the causes of the chemical pollutants? What remedies could be put into place? T.R.U.E. BlueSM gives students real-hand experience with E-STEM curriculum.

College Student

Eligibility

Thirty (30) College Students (two year or four year) are eligible to participate in the K.I.D.S in Stream program. First preference is given to partnering colleges (Washburn University, Johnson County Community College, and Metropolitan Community College),, but other college students can apply from other two and four-year college institutions.

Students must meet the criteria below (at the time of application) to be eligible to participate in the K.I.D.S in Streams program.

- Be interested in and have a passion for education, environmental science, or related fields.
- Current student at a post-secondary institution/
- Be in good standing status at institution
- Be enrolled in applicable institution degree or certificate program
 - Preference given to students in the following degree programs.
 - Associate in Arts Teaching
 - Early Childhood Education and Development
 - Environmental Health & Safety Technology
 - Geographic Information Systems
 - Associate in Science
- Be able to transport one-self to assigned teaching and field experience sites within the Kansas City Metropolitan area (Kansas/Missouri) or have transportation arrangements made prior to applying.
- Complete and submit K.I.D.S in Streams Application

Stipend:

Each College Student participant who successfully completes all components of the K.I.D.S in Streams program will receive a \$200.00 stipend from Blue River Watershed Association (BRWA). Stipends are paid at the conclusion of the program (2022). Questions about the stipend can be directed to Lynn Youngblood, BRWA Executive Director at youngblood@brwa.net.

K.I.D.S in Streams program Length:

The K.I.D.S in Streams program will start September 2022 and end December 2022. Participants will receive their confirmed dates and times once the middle school sites have been confirmed. All efforts will be made to work with participants' work and school schedules.

Participation Expectation:

Each College Student participant will be required to participate in a program orientation, program assessments, T.R.U.E. BlueSM teacher training, and teach all four of the T.R.U.E. BlueSM lessons at assigned middle schools / field sites. In addition to these tasks each College Participant will be paired with high school Teacher Cadets. Below are the required tasks and the estimated amount of time to complete each of these tasks. Please note that this does not include the amount of time preparing for tasks (Lesson 1-4) and time to travel to and from middle schools / field sites.

Lesson/Item	Type	Time	Location	College Student	
				Required	Responsibility
Lesson 1: Asking the right question	Lecture	1 hour	Classroom	X	Teach lesson
Lesson 2: Preparing for field work	Lecture	1 hour	Classroom	X	Teach lesson
Lesson 3: Field Work with local stream	Lab	4 hours	Field (water site)	X	Mentor Cadet groups
Lesson 4: Analyzing Student Data	Lecture	1 hour	Classroom	X	Teach lesson
Pre/Post Assessments	Assessment	1 hour	NA	X	Participant
Training Orientation	Training	2 hour	Field Site (TBD)	X	Participant

Application: All participants who meet the eligibility requirements are encouraged to complete an online application utilizing the link provided below. Any questions regarding the application can be sent to Dr. Mike Strohschein, Dean, Washburn University Institute of Technology at mike.strohschein@washburn.edu or strohschein@brwa.net

Learn more: <https://www.brwa.net/education/kids-in-streams.html>

Application Link: <https://www.brwa.net/education/kids-college-student-application.html>

Deadline to Apply: September 22, 2022 (open until all spots are filled)

Notification of Program Acceptance: October 1, 2022



